New York State Department of Transportation Yellow Flag NB2358W009

By: Alex Abreu

Flag Date: May 01, 2023

Superseding Information:

This flag supersedes: YF NB2228W002

Structure Information

BIN: 1065318 Region: 11 - NEW YORK CITY

Feature Carried: 278I278IX2M23027 County: KINGS

Feature Crossed: 6TH AVENUE Political Unit: City of NEW YORK
Orientation: 8 - NORTHWEST Approximate Year Built: 1962

Posted Load Matches Inventory: Yes

Bridge Load Posting (Tons): Not Posted for Load

Primary Owner: New York State Department of Transportation

Primary Maintenance Responsibility: 12 - State - Subcontracted to another Party

Typical or Main Span Type: 3 - Steel, 02 - Stringer/Multi-Beam or Girder

This Bridge is not a Ramp Number of Spans: 322

Verbal Notification Information

Person Notified: Heinz Joachim, P.E. Date: May 01, 2023 11:16:00 AM

Of: NYSDOT Region 11

Signature Information

Signature: Alex Abreu, P.E. 099761-1 Date: May 04, 2023

Reviewed By: Robert Kemp Date: May 04, 2023

Attachments: 6

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Flagged Elements

Parent Element	Element	Total Quantity	Unit
Span Number : 30			
	107 - Steel Open Girder/Beam	1131	ft

Flagged Condition Description

This Yellow Flag No. NB2358W009 is reissued condition of previous Yellow Flag NB2228W002.

Location: Span 30, Girder G1 at Pier 30 above the sidewalk at the intersection of 65th Street WB roadway and 4th Avenue.

Description:

The left connection angle at Girder G1 connection to the Pier 30 capbeam exhibits a 13" long x 3/16" wide vertical crack at the lower fillet section starting at the bottom of the angle (previously documented 12" long x 3/16" wide vertical crack, resulting in the crack increasing approximately 1" in length) (Photo #5). This crack represents a loss of approximately 45% of the angle's total height of 29". The right connection angle at Girder G1 connection to the Pier 30 capbeam exhibits a 8-1/2" long x 1/8" wide vertical crack at the fillet section starting at 1/2" from the bottom of the angle (previously documented 8-3/8" long x 1/8" wide vertical crack, resulting in crack increasing approximately 1/8" in length) (Photo #6). This crack represents a loss of approximately 30% of the angle's total height of 29". (refer to Yellow Flag Condition Sketch #2 for more details)

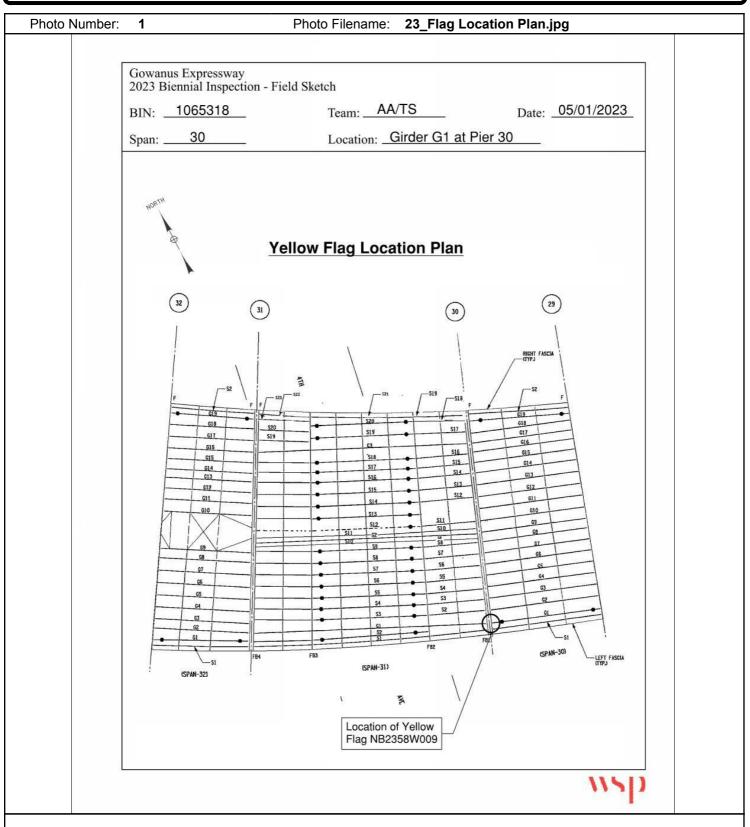
This is a reissued flag.

Notes:

- 1. Girder G1 is a load path redundant member with no distress observed in the structural deck above this area.
- 2. Adjacent Girder G2 exhibits no significant defects.
- 3. Adjacent Stringer S1 exhibits severe section loss and corrosion hole in the stringer web and bottom flange. Red Flag NB2358W008 was issued for this location during this biennial inspection.
- 4. Due to the access restrictions from cables in place for the ongoing contractor platform installation in Span 30, the Girder G1 location was accessed with a 30ft bucket truck parked on the sidewalk at the intersection of 65th Street and 4th Avenue. (Photo #4)
- 5. The initial inspection date for the above flagged girder was 4/27/2023. The condition of the adjacent Stringer S1 was discussed in depth between the inspection team and QC which lead to further internal discussion regarding load rating. The stringer location was revisited on 5/1/2023 to obtain further information for load rating analysis which resulted in the issuing of the red flag. The above flagged girder was revisited as well to verify no changes in the conditions since it was adjacent to the red flagged stringer. There were no changes in the conditions at the flagged girder between both inspection dates 4/27/2023 and 5/1/2023.
- 6. The previous 2022 Yellow Flag NB2228W002 documented the above girder location with the following defect: The left connection angle at Girder G1 connection to the Pier 30, left Column C1 exhibits a 12" long x 3/16" wide vertical crack at the lower fillet section, beginning at the base of the angle. This crack represents a loss of approximately 41% of the angle's total height of 29". There was no change from the previous inspection at this location. The right connection angle between Girder G1 and of Pier 30 (left Column C1) exhibits a 8-3/8" long x 1/8" wide vertical crack beginning 1/2" from the base of the angle. This crack has increased in length by 1-1/8" from 7-1/4" to 8-3/8" since the previous inspection. This crack represents a loss of approximately 29% of the angle's total height of 29".

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Flag Photographs



Attachment Description: Flag Location Plan

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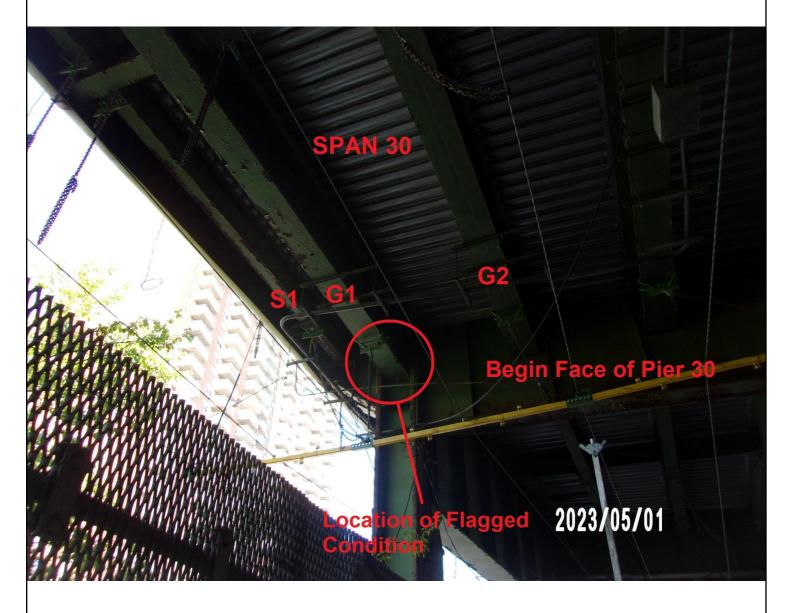
Photo Number: Photo Filename: 23_Span 30_Girder G1_Connection Detail.jpg 2 Gowanus Expressway 2022 Biennial Inspection - Field Sketch Team: AA/TS BIN: __1065318 Date: __5/1/2023 30 Location: Girder G1 at Pier 30 Span: _ **Yellow Flag Condition Sketch** COLUMN C1 RIGHT CONNECTION ANGLE LEFT CONNECTION ANGLE 29" 13" LONG VERTICAL CRACK IN FILLET UP TO 3/16" WIDE 8-1/2" VERTICAL CRACK IN FILLET UP TO 1/8" WIDE 1/2 GIRDER G1 ELEVATION OF SPAN 30, GIRDER G1 AT PIER 30 COLUMN C1 LOOKING END

Attachment Description: Flag Condition Sketch

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Photo Number: 3 Photo Filename: 23_113_6741.JPG

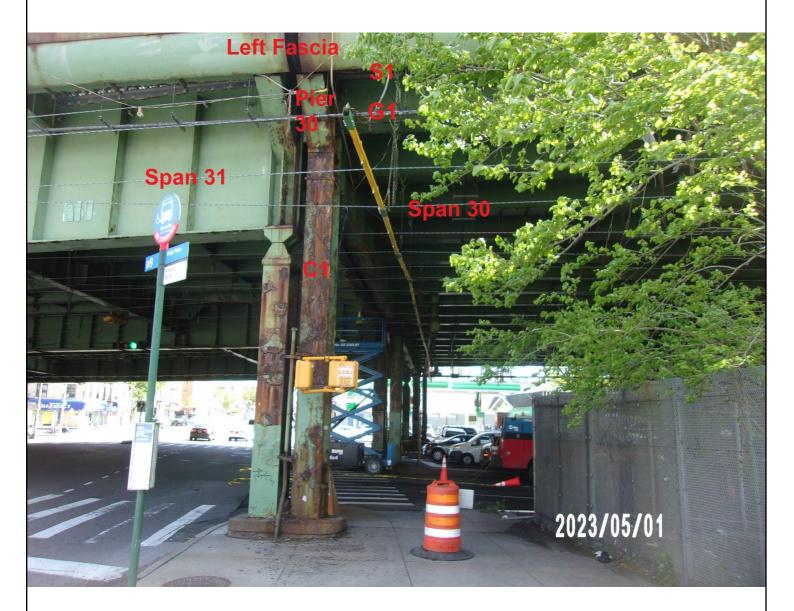


Attachment Description: General view of the flagged condition at Girder G1 in Span 30 at Pier 30. Looking End.

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Photo Number: 4 Photo Filename: 23_113_6737.JPG



Attachment Description: The left side of Girder S1 in Span 30 at Pier 30. The flagged condition at the girder is located above Column C1 and the sidewalk at the intersection of 65th Street and 4th Avenue. Also, there were access restrictions for the stringer due to the cables in place for the ongoing contractor platform installation in Span 30. Looking Right.

Photo Number:



Photo Filename: 23_113_6646.JPG

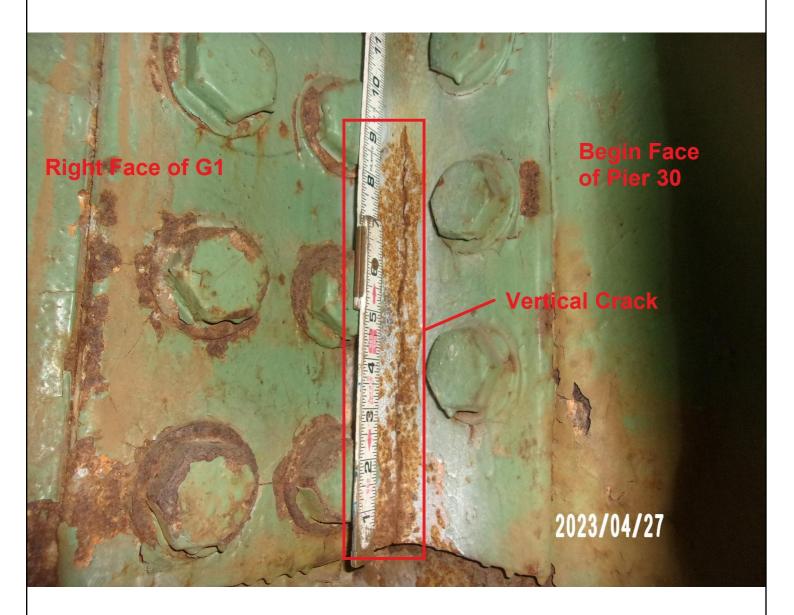
Attachment Description: The left face of Girder G1 in Span 30 at Pier 30. The left connection angle exhibits a 13" long vertical crack in the fillet section at the bottom of the angle. Looking Right.

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Photo Number: 6 Photo Filename: 23_113_6635.JPG



Attachment Description: The right face of Girder G1 in Span 30 at Pier 30. The right connection angle exhibits an 8-1/2" long vertical crack in the fillet section at the bottom of the angle. Looking Left.